



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,754	09/22/2004	Donal O'Shea	KEL01 P-139	8300

28101 7590 03/27/2006

VAN DYKE, GARDNER, LINN AND BURKHART, LLP
2851 CHARLEVOIX DRIVE, S.E.
P.O. BOX 888695
GRAND RAPIDS, MI 49588-8695

EXAMINER

GRAZIER, NYEEMAH

ART UNIT PAPER NUMBER

1626

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/508,754	Applicant(s) O'SHEA ET AL.	
	Examiner Nyeemah Grazier	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) 31-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/23/06, 3/14/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION
FIRST ACTION ON THE MERITS

I. ACTION SUMMARY

Claims 27-36 are currently pending. Claims 31-36 are withdrawn from further consideration by the Examiner because Claims 31-36 are drawn to a non-elected invention. 37 C.F.R. § 1.142(b). Claims 31-36 are subject to rejoinder, commensurate in scope of the elected invention, upon determining that the products are in condition for allowance

II. PRIORITY

This application is a 371 of PCT/EP03/03174, filed on March 24, 2003. Applicant's claim to priority and benefit of the earliest filing date under 35 U.S.C. § 119(a-d) to foreign application Ireland SO2/0209, filed March 22, 2002.

III. INFORMATION DISCLOSURE STATEMENT

The information disclosure statements (IDS) submitted on January 23, 2006 and March 14, 2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

IV. RESTRICTION/ELECTION

A. Election: Applicant's Response

Applicant, in response to the Lack of Unity of Invention, declined to elect a group from the exemplary Groups. Applicant provisionally elects the "compound in which M is BF₂; R₂ and

Art Unit: 1626

R5 are each Br; R3 and R4 are each phenyl; and R1 and R6 are each *para* methoxyphenyl. The provisional specie election reads on compound 4b in the Specification. The pending claims read on “compositions” and not compounds. Thus, the elected invention are compositions in which M is BF₂; R2 and R5 are each Br; R3 and R4 are each phenyl; and R1 and R6 are each *para* methoxyphenyl.

Advisory of Rejoinder

The Examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejections are governed by 37 CFR 1.116; amendments submitted after allowances are governed by 37 CFR 1.312.

The following is a recitation of M.P.E.P. 821.04, Rejoinder:

Where product and process claims drawn to independent and distinct inventions are presented in the same application, applicant may be called upon under 35 U.S.C. 121 to elect claims to either the product or process. See MPEP § 806.05(f) and § 806.05(h). The claims to the nonelected invention will be withdrawn from further consideration under 37 CFR 1.142. See MPEP § 809.02(c) and § 821 through § 821.03. However, if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims, which depend from or otherwise include all the limitations of the allowable product claim will be rejoined.

Where the application as originally filed discloses the product and the process for making and/or using the product, and only claims directed to the product are presented for examination, when a product claim is found allowable, applicant may present claims directed to the process of making and/or using the patentable product by way of amendment pursuant to 37 CFR 1.121. In view of the rejoinder procedure, and in order to expedite prosecution, applicants are encouraged to present such process claims, preferably as dependent claims, in the application at an early stage of prosecution. Process claims, which depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final

Art Unit: 1626

rejection or allowance. Amendments submitted after final rejection are governed by 37 CFR 1.116. Process claims which do not depend from or otherwise include the limitations of the patentable product will be withdrawn from consideration, via an election by original presentation (see MPEP § 821.03). Amendments submitted after allowance are governed by 37 CFR 1.312. Process claims which depend from or otherwise include all the limitations of an allowed product claim and which meet the requirements of 35 U.S.C. 101, 102, 103, and 112 may be entered.

Where product and process claims are presented in a single application and that application qualifies under the transitional restriction practice pursuant to 37 CFR 1.129(b), applicant may either: (A) elect the invention to be searched and examined and pay the fee set forth in 37 CFR 1.17(s) and have the additional inventions searched and examined under 37 CFR 1.129(b)(2); or (B) elect the invention to be searched and examined and not pay the additional fee (37 CFR 1.129(b)(3)). Where no additional fee is paid, if the elected invention is directed to the product and the claims directed to the product are subsequently found patentable, process claims which either depend from or include all the limitations of the allowable product will be rejoined. If applicant chooses to pay the fees to have the additional inventions searched and examined pursuant to 37 CFR 1.129(b)(2) even if the product is found allowable, applicant would not be entitled to a refund of the fees paid under 37 CFR 1.129(b) by arguing that the process claims could have been rejoined. 37 CFR 1.26(a) states that "[T]he Commissioner may refund any fee paid by mistake or in excess of that required. A change of purpose after the payment of a fee...will not entitle a party to a refund of such fee..." In this case, the fees paid under 37 CFR 1.129(b) were not paid by mistake nor paid in excess, therefore, applicant would not be entitled to a refund. In the event of rejoinder, the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. If the application containing the rejoined claims is not in condition for allowance, the subsequent Office action may be made final, or, if the application was already under final rejection, the next Office action may be an advisory action. Form paragraphs 8.42 through 8.44 should be used to notify applicant of the rejoinder of process claims which depend from or otherwise include all the limitations of an allowable product claim.

In the event of rejoinder, the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104 - 1.106. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. If the application containing the rejoined claims is not in condition for allowance, the subsequent Office action may be made final, or, if the application was already under final rejection, the next Office action may be an advisory action.

The following is a recitation from paragraph five, "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. §103(b)" (1184 TMOG 86(March 26, 1996)):

"However, in the case of an elected product claim, rejoinder will be permitted when a product claim is found allowable and the withdrawn process claim **depends from or otherwise includes all the limitations of an allowed product claim**. Withdrawn process claims not commensurate in scope with an allowed product claim will not be rejoined." (emphasis added)

Pursuant to M.P.E.P. § 821.04 and In re Ochiai, 71 F.3d 1565, 37 USPQ 1127 (Fed. Cir. 1995), rejoinder of product claims with process claims commensurate in scope with the allowed

Art Unit: 1626

product claims will occur following a finding that the product claims are allowable. Until, such time, a restriction between product claims and process claims is deemed proper. Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution to maintain either dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**

Applicant is reminded that upon cancellation of claims to a nonelected invention, the inventions must be amended in compliance with 37 C.F.R. 1.48(b) if one of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(i).

B. Traversal

The applicant traverses on the grounds that the Examiner has improperly concluded lack of unity of invention because the cited reference, *Takuma et al.*, discloses a different utility than the instant invention. (See, Remarks, p. 8). The traversal has been fully considered and is not persuasive because the test of unity of invention is not common utility, but rather whether the special technical feature defines contribution over the art. In the instant application, the (5Z)-N-(2H-pyrrol-2-ylidene)-3H-pyrrol-2-amine moiety is the technical feature that unites the claims. However, the technical feature is known in the art.

B. Status of the Claims

i. Scope of the Elected Subject Matter

Art Unit: 1626

The applicant has elected the products wherein M is BX₂; R² and R⁵ are each Br; R³ and R⁴ are each phenyl; and R¹ and R⁶ are each *para* methoxyphenyl. Thus, the scope of the subject matter are the compositions of the formula



Wherein M is BX₂; X is halide and R¹-R⁶ are as recited in claim 27.

ii. Non-elected Subject Matter Withdrawn 37 C.F.R. §1.142(b)

The non-elected subject matter are claims 27-30 (in-part); claims 31-36 wherein the formula (above) M is chelating agent other than BX₂ where X is halide.

V. REJECTION(S)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by *Morgan, et al.*, US 5,446,157 wherein the instant formula M is BF₂, R² and R⁵ are each hydrogen and R¹, R³, R⁴ and R⁶ are alkyl groups. (*See, Morgan, et al.*, col. 30, ll. 57-66; col. 31, ll. 1-12). The '157 patent teaches compound 26 where R is alkyl. (*Id.*). Pharmaceutical composition of compound 26 is also disclosed as the patent is drawn to compounds and compositions and the

Art Unit: 1626

compounds were preferably “provided in a 25mg/ml sterile water solution.” (*Id.*, at col. 37, ll. 35-38).

35 USC § 103 - OBVIOUSNESS REJECTION

The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Graham v. John Deere Co. set forth the factual inquiries necessary to determine obviousness under 35 U.S.C. § 103(a). See *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Specifically, the analysis must employ the following factual inquiries:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

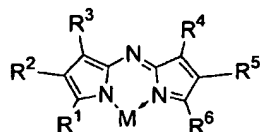
(1) Claims 27-30 are rejected under 35 U.S.C. § 103(a) as being obvious over *Morgan, et al.*, US 5,446,157 (Aug. 29, 1995).

(2) Claims 27-30 are rejected under 35 U.S.C. 103(a) as being obvious over *Brinkley, et al.*, US 5,326,692 (July 5, 1994) (WO 93/23492 A1).

Art Unit: 1626

(3) Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being obvious over Hirosuke, T., JP 11092479.

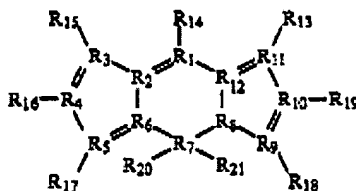
The instant invention is drawn to compositions useful as *photodynamic therapeutic agents*, which are used as a technique for treating tumors. The products of the instant invention are represented by the formula below where M is a chelating agent and R₁-R₆ are selected from the group H, cyclic moiety, heteroaryl moiety, optionally substituted straight or branched chain alkyl or acyl. In addition R² and R⁵ can be a heavy atom. The variable "M" is preferably BX₂ where X can be halide.



The Scope and Content of the Prior Art (MPEP §2141.01)

(1) Morgan, et al.

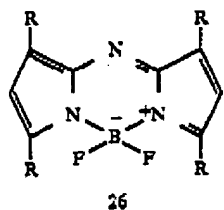
Morgan, et al. teaches compounds and compositions and method of use of boron difluoride compounds. The invention is represented by the general formula (a):



The prior art teaches that the compounds and compositions of formula (a) are useful as "*photochemical agents in photodynamic therapy techniques*" used to destroy targeted tissue. (5,446,157, col. 7, ll. 39-50). Furthermore, the prior art discloses azapyrromethene-BF₂ complex

Art Unit: 1626

in Example XI, Scheme 2, Compound 26. (*See, Id.* at col. 31, ll. 1-14). Compound 26 is represented by the following structure below.



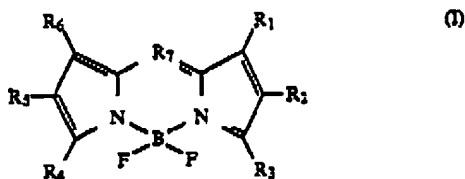
where variable "R" represents alkyl. (*Id.* at col. 30, l. 49). The compounds

where used in photodynamic therapy by introducing the "compositions into the body of a subject." (i.e. the compound is provided in sterile water solution and injected into a tumor). (*Id.* at col. 37, 32-41).

Although the specie is drawn to formula (a) where R (above) are alkyl, the patent renders the instant invention obvious where R¹-R⁶ in the instant invention is independently selected from H, COOH, CONH₂, phenyl, naphthyl, pyrrol, pyrazolyl, triazolyl, tetrazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, and the like because they have been described in the Morgan et al. reference. (*Id.* at col. 5, ll. 7-35).

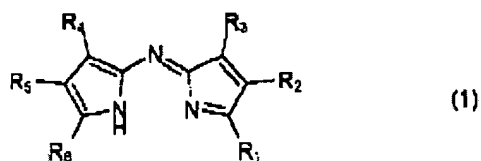
(2) *Brinkley et al.*

Brinkley, et al. teaches microparticles which are labeled with fluorescent dyes such as polyazaindacene compounds. (*Brinkley, et al.*, 5,326,692, col. 1, ll. 1-17). The invention is drawn to the formula (I) below where R1-R6 may be the same or different and are selected from the group H, halogen, alkyl, alkoxy, alkenyl, cycloalkyl, arylalkyl, acyl or aryl, heteroaryl. (*Id.* at col. 8, ll. 32-54).



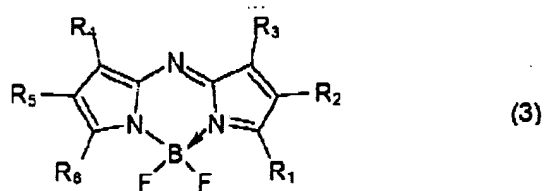
(3) ***Hirosuke, T.***

Hirosuke, T., (JP 11092479) publication is drawn to an optical recording medium. The objective of the compound is to make a metal chelate compound from azapyrromethene compound of formula (I). The medium is enabled by the short wavelength lasers.



The publication also teaches the compound of formula

(3).



See col. 1, ll. 30-40. The variables R1-R6 represent,

for example, hydrogen, alkyl, alkoxy, alkenyl, alkoxycarbonyl, aryl, and heteroaryl.

The Difference Between the Prior Art and the Claims (MPEP §2141.02)

The difference between *Morgan, et al.* and *Brinkley, et al.* and the instant invention is in scope. The prior art reference teaches a generic formula (a) while the instant invention is drawn specifically to azapyrromethene boron complex. Additionally the instant application is drawn to

Art Unit: 1626

compositions comprising the compound at issue while the prior art is drawn to the compound, compositions and methods of use.

Resolving Level of Ordinary Skill in the Pertinent Art

The pertinent art is photodynamic therapy. Photodynamic therapy (PDT) is a method using photodynamic therapeutic agents (e.g. compositions) for treating tumor tissue wherein the compound has photosensitizing properties. (Specification, p. 1, ll. 8-15). PDT is also applicable in “certain non-neoplastic diseases.” *Id.*

The pertinent art may also be characterized as fluorescent chemical compositions. Fluorescent compositions are used to detect and diagnose diseases tissue using PDT techniques. (*Boyer, et al.*, US 4,916,711, col. 2, ll. 35-47).

The pertinent art in the Japanese reference is fluorescent light and laser chemistry.

Prima Facie Obviousness-The Rational and Motivation (MPEP §2142-2413)

The motivation to make claimed compound derives from the expectation that structurally similar compounds are generally expected to have similar properties and have similar utilities. In re Gyurik, 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979). Furthermore it is obvious to add a carrier to a known or obvious compound where the known or obvious compound has known utility. *See, Ex parte Douros*, 163 U.S.P.Q. 667 (PTOBAI 1968). In the Japanese publication, the motivation is derived from the photochemical/fluorescent properties of azapyrromethene metal complexes.

Additionally, a *prima facie* case for obviousness is also derived from the utility of the art and the instant inventions. Both the instant invention and the prior art of record are used as photodynamic therapeutic agents. (See, *Morgan, et al.*, col. 4, ll. 46-54). *Brinkley et al.* also uses similar utility as the compounds are useful fluorescent activity.

Further, a *prima facie* case for obviousness is also derived from the expressed examples in the prior art, such as compound 26. (See, e.g., *Morgan, et al.* at col. 31, ll. 1-14).

Lastly, obviousness is also derived from the preferred teaching of the references. The reference teaches preferred compounds and preferred variable substituents. In the "Summary of the Invention" section of the *Morgan, et al.* patent R¹ is preferably N; R⁶ and R⁸ are preferably N and R², R³, R⁵, R⁹, R¹¹ and R¹² are preferably C; R⁷ is preferably B; and R²⁰ and R²¹ are preferably F. (See, *Morgan et al.*, col. 4, ll. 55-65; col. 5, ll. 1-40). In consideration of the totality of the circumstances the references would have motivated one skilled in the art to make and use in the instant compounds and compositions with the expectation that they would both have the same effect.

VI. OBJECTION(S)

Specification

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.

Art Unit: 1626

- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

Art Unit: 1626

- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

The disclosure is objected to because of the following informalities: The instant application contains drawings filed September 22, 2004. However, the specification does not have a "Brief Description of the Drawing(s)" section. *See* M.P.E.P. 608.01(f). Appropriate correction is required.

Claim Objection-Non Elected Subject Matter

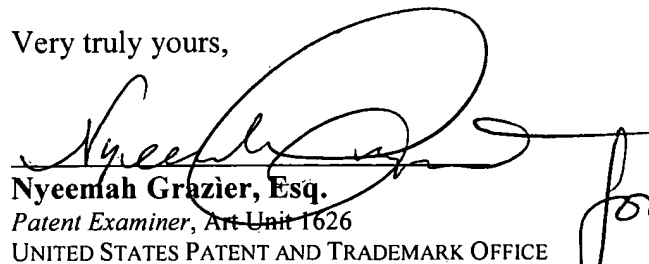
Claims 27-30 are objected to as containing non-elected subject matter. To overcome this objection, Applicant should all non-elected subject matter.

VII. CONCLUSION


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nyeemah Grazier whose telephone number is (571) 272-8781. The examiner can normally be reached on Monday through Thursday and every other Friday from 8:30 a.m. - 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. M^eKane, can be reached on (571) 272 - 0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Very truly yours,


Nyeemah Grazier, Esq.
Patent Examiner, Art Unit 1626
UNITED STATES PATENT AND TRADEMARK OFFICE
400 Dulany Street
Alexandria, VA 22314-5774
Tel. No.: (571) 272-8781

KAMAL A. SAEED, PH.D.
PRIMARY EXAMINER


Joseph K. M^eKane
Supervisory Primary Examiner, Art Unit 1626
UNITED STATES PATENT AND TRADEMARK OFFICE
400 Dulany Street
Alexandria, VA 22314-5774
Tel. No.: (571) 272-0699